



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,549	04/12/2004	Frank A. Howell	6964CIP	1813
55740	7590	04/04/2006	EXAMINER	
GAUTHIER & CONNORS, LLP 225 FRANKLIN STREET BOSTON, MA 02110			RODRIGUEZ, RUTH C	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/822,549	HOWELL, FRANK A.	
	Examiner	Art Unit	
	Ruth C. Rodriguez	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) 2-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 8-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 8-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Dillin (US 541,729).

A buckle (A) is used with a flexible strap (E) having a substantially uniform width and thickness and end tab of increased thickness (Figs. 1 and 3). The buckle captures and releasably retains the end tab (Figs. 1 and 3). The buckle comprises a base (lower surface as seen in Fig. 4), parallel side walls (side surface as seen in Fig. 4), first slots (B,D) and flanges (upper surface as seen in Fig. 4). The side walls extend upwardly to cooperate therewith in defining an open-ended receiving channel having an entry end (right end of H) and an exit end (left end of H). The first slots extend transversely across the base (Figs. 1-4). The buckle is attached to the strap by weaving the strap into and out of the channel through the first slots (Figs. 1 and 3). The flanges are spaced vertically from the base and extend inwardly in cantilever fashion from the side walls to define an open-ended slot communicating with and extending along the length of the receiving channel (Figs. 1-4). The slot allows longitudinal pinching and lateral

insertion of the strap into the receiving channel and the flanges have undersides receiving the end tab in the receiving channel via the strap entry end and to releasably wedge the end tab in and prevent withdrawal of the end tab from the receiving channel via the exit end (Figs. 1, 2 and 9).

A buckle (A) is used with a flexible strap (E) having a substantially uniform width and thickness and end tab of increased thickness (Figs. 1 and 3). The buckle captures and releasably retains the end tab (Figs. 1 and 3). The buckle comprises a base (lower surface as seen in Fig. 4), parallel side walls (upper surface as seen in Fig. 4) and flanges (upper surface as seen in Fig. 4). The side walls extend upwardly from the base to cooperate therewith in defining an open-ended receiving channel (Figs. 1-4). The flanges are spaced vertically from the base and extend inwardly from the side walls to define an open-ended slot communicating with the receiving channel (Figs. 1-4). The flanges have converging sections leading from one end of the slot to an intermediate location along the length thereof (Figs. 1-4). The slot allows longitudinal pinching and lateral insertion of the strap into the receiving channel (Figs. 1-4). The converging sections and the flanges have undersides coacting with the base in releasably wedging the end tab in the receiving channel (Figs. 1-4).

A buckle (A) is used with a flexible strap (E) having a substantially uniform width and thickness and end tab of increased thickness (Figs. 1 and 3). The buckle captures and releasably retains the end tab (Figs. 1 and 3). The buckle comprises a base (lower surface as seen in Fig. 4), parallel side walls (upper surface as seen in Fig. 4) and flanges (upper surface as seen in Fig. 4). The side walls extend upwardly from and

cooperating with the base to define an open-ended receiving channel having an entry end (right end of H) and an exit end (left end of H). The flanges are spaced vertically from the base and extend inwardly from the side walls to define an open-ended slot communicating with the receiving channel (Figs. 1-4). The flanges have converging sections leading from one end of the slot to an intermediate location along the length thereof (Figs. 1-4). The slot allows longitudinal pinching and lateral insertion of the strap into the receiving channel (Figs. 1-4). The converging section and the flanges have undersides coacting with the base in releasably wedging the end tab in the receiving channel (Figs. 1-4).

The flanges have converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel (Figs. 1-4).

The end tab defines a shoulder extending transversely across the width of the strap and the undersides of the flanges define stop surfaces engageable with the shoulder (Figs. 1 and 3).

The undersides of the flanges further define jamming surfaces sloping downwardly towards the stop surfaces (Figs. 1-4).

The base is secured to a section of the strap (Figs. 1 and 3).

The base is formed as an integral part of a carrier structure (L after it is fastened).

3. Claims 8-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Scholey (US 5,970,585).

A buckle (16) is used with a flexible strap (18,20) having a substantially uniform width and thickness and end tab of increased thickness (Fig. 2). The buckle captures and releasably retains the end tab (Figs. 1 and 2). The buckle comprises a base (lower surface as seen in Fig. 2), parallel side walls (upper surface as seen in Fig. 2) and flanges (24). The side walls extend upwardly from the base to cooperate therewith in defining an open-ended receiving channel (between 24). The flanges are spaced vertically from the base and extend inwardly from the side walls to define an open-ended slot communicating with the receiving channel (Fig. 2). The flanges have converging sections leading from one end of the slot to an intermediate location along the length thereof (Fig. 2). The slot allows longitudinal pinching and lateral insertion of the strap into the receiving channel (Fig. 2). The converging sections and the flanges have undersides coacting with the base in releasably wedging the end tab in the receiving channel (Fig. 2).

A buckle (16) is used with a flexible strap (18,20) having a substantially uniform width and thickness and end tab of increased thickness (Fig. 2). The buckle captures and releasably retains the end tab (Fig. 2). The buckle comprises a base (lower surface as seen in Fig. 2), parallel side walls (upper surface as seen in Fig. 2) and flanges (24). The side walls extend upwardly from and cooperating with the base to define an open-ended receiving channel having an entry end (left end) and an exit end (right end). The flanges are spaced vertically from the base and extend inwardly from the side walls to define an open-ended slot communicating with the receiving channel (Fig. 2). The flanges have converging sections leading from one end of the slot to an intermediate

location along the length thereof (Fig. 2). The slot allows longitudinal pinching and lateral insertion of the strap into the receiving channel (Fig. 2). The converging section and the flanges have undersides coacting with the base in releasably wedging the end tab in the receiving channel (Fig. 2).

The flanges have converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel (Fig. 2).

The end tab defines a shoulder (22) extending transversely across the width of the strap and the undersides of the flanges define stop surfaces engageable with the shoulder (Fig. 2).

The undersides of the flanges further define jamming surfaces sloping downwardly towards the stop surfaces (Fig. 2).

The base is secured to a section of the strap (Figs. 1 and 2).

Response to Arguments

4. Applicant's arguments filed on 17 January 2006 have been fully considered but they are not persuasive.

5. The Applicant argues that claims are allowable over the prior art because claims 1 and 8 recite "the end tab 20 is releasably wedged in the receiving channel 36" and that claim 9 "calls for downwardly sloping surfaces configure to frictionally retain the end tab in the receiving channel." The Examiner fails to be persuaded.

6. Regarding Dillon, the Applicant argues that Dillon fails to reliably wedge the end tab in the receiving channel or that the downwardly sloping surfaces frictionally retains the end tab in the receiving channel based on the lines 57-62 of the specification of Dillon that discloses that the bight N serves to prevent cord E from slipping and prevents the knot from slipping out of the counterbore. The Examiner acknowledges that the specifications of Dillon state that the bight N serves to prevent the cord from slipping, however, the end tab (knot in this case) must be wedge in the receiving channel or must be frictionally retained by the downwardly sloping surfaces because otherwise the cord will slip out of the buckle and the buckle will not be able maintain contact with the rope because the rope will not have anything keeping it within the buckle. If the Applicant's argument was correct, the buckle of Dillon will not require a knot or a counterbore since the bight is preventing the cord from slipping. But contrary to the Applicant's argument, Dillon does need the knot and the counterbore so that the knot is releasably wedge in the counterbore or that the knot is frictionally retained by the downwardly sloping surfaces in such a manner that the wedging action or frictional retention will cooperate with the bight to keep the cord within the buckle.

7. The argument presented by Applicant is that Scholey discloses an elastic strap that serves to hold wing portions of the buckle member in abutting engagement with the flanges 24 of the buckle member when in tension and Scholey fails to disclose that the underside of the flanges do not wedge or frictionally engage the wing portions. The Applicant based his argument with the statement that "if the strap 20 were not elastic and stretchable to hold the wing portions 20 against the flanges 24, the Scholey buckle

simply would not hold.” This argument fail to persuade. Once again the Applicant only concentrates in one aspect of the buckle member and fails to address the way the structure interacts with each other. If wing portions of Scholey were not being wedge or frictionally engaged by the underside of the flanges, the wing portions will just slip out of the buckle member and will not be retained. The elasticity of the strap by itself will not prevent the wing portions from slipping out of the buckle member and they require wedging or frictional engagement with the underside of the flanges to retain the wing portions within the buckle member.

8. Finally, the Examiner will like to point out that the claims only require the end tab wedges in the receiving channel or the end tab is frictionally retained by the downwardly sloping surfaces and the claims can still be anticipated by the prior art references since the claim utilizes an open ended transitional phrase “comprising” that allows other forces to act upon the strap.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dillon (US 541,729), Watson (US 1,466,495), Campbell et al. (US 4,991,265), Pritchard et al. (US 5,007,138), McIntire (US 5,383,259), Elseheimer et al. (US 5,542,462), Scholey (US 5,970,585) and Munsell, Jr. (US 6,192,559 B1) are cited to show state of the art with respect to buckles that have some of the features claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.


Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

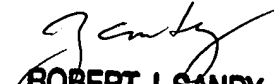
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Art Unit: 3677

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677


rcr
April 3, 2006


ROBERT J. SANDY
PRIMARY EXAMINER